



April 12, 2018

*North Carolina Department of Environmental Quality
Division of Waste Management
Pre-Regulatory Landfill Program*



677 Pre-1983 Landfills

- Uncontrolled dumps existing before regulations
- Include hazardous wastes, medical wastes and asbestos-containing materials
- No liners, covers or engineering controls
- Uncontrolled hazardous vapors and explosive gas
- Unstable eroded slopes, exposed waste
- No prohibition on land use over the waste disposal area
- 80% have a home, school, day care, park and/or drinking water source on or within 1000 feet
- 80% wholly or partially privately owned



Pre-Regulatory Landfill Program

- 40% of a state-wide solid waste disposal tax used to address risks at Pre-1983 Landfills
- Volume of wastes makes removal cost-prohibitive (tens of millions of dollars each)
- DWM contracts testing to determine nature and extent of contamination in soils, groundwater, surface water and air
- DWM contracts remedy to control exposure to contamination
- Most remedies involve:
 - alternate water supplies
 - cover systems
 - vapor control systems
 - land use restrictions
 - stream restoration
 - waste removal and groundwater treatment only where necessary



*Pre-Regulatory Landfill Program
Owner Election of Assumption of Risk
Session Law 2017-57 Section 13.4*

- Session Law 2017-57 Section 13.4 allows property owners to suspend Pre-Regulatory Landfill Program mitigation of landfill hazards
- Property owner must assume all liability for on- and off property effects
- Rules are not mandatory for owners to apply for this suspension
- DWM has been considering rules to clarify the process
- No owners to date have elected to request this option
- First annual report on implementation of this provision due and submitted to General Assembly April 2018

Efforts to Expedite Program

- Will briefly go over:
 - Independent contractor study
 - Suggestions by external parties
 - Efforts to identify and resolve sites requiring minimal work



Independent Contractor Pilot Study

- Determine if less state oversight of engineering contractors can expedite remedy completion
- Two contracts signed January 4, 2017
- Four sites included in study
- Two larger, two smaller
- Two with contaminant assessment complete, two need assessment before remedy



Pilot Study Criteria

- DEQ involvement is limited
- Approach relies heavily on contractor sworn certifications of completion of steps and compliance with written requirements
- Independent decision-making by contractors
- Technical guidance documents provided to contractors
- Contractors are responsible for
 - Developing and executing all work
 - Obtaining necessary permits
 - Determining risk-based cleanup levels
 - Ensuring all activities are protective of human health
 - Conducting public notice steps

Pilot Study - DEQ Involvement

- Task and payment authorization limited to confirmation funds available and contract unit rates employed
- Review of 24-hour notice reports on imminent hazards
- Review of brief summaries required in each report regarding locating and addressing receptors
- Review of brief summary of planned remedy
- Approve land use restrictions needed as part of the remedy
- Will review cost and time efficiencies at conclusion of study



Suggestions by External Parties

Interested private waste firms proposed work completion could be expedited by:

- Limit work to excavation, screening and removal of materials for recycling and/or disposal
- Use private parties to manage the work

Suggestions by External Parties

Actions Taken

- All assessment and remediation work continues to be conducted using private firms
- Removal and refill of entire waste disposal area is generally cost prohibitive even if recyclables are recovered, however –
 - Most remedies involve at least some removal or relocation of wastes
 - All subcontracted remedies >\$500K are advertised
- A contract advertisement period was extended to allow interested disposal firms opportunity develop partnerships with engineering firms for purposes of bidding on PRLF contracts
- Process also set up to solicit under-utilized businesses as part of general contracting and subcontracting processes



Suggestions by External Parties

Actions Taken

- Some remedies involve treatment of contaminated soils with off-site disposal at permitted solid waste landfills as daily cover
- Such remediation benefits the landfill operator as well as DWM:
 - DWM able to treat and dispose as a solid waste rather than send to a hazardous waste facility at much higher cost
 - Recipient landfill not only receives the daily cover material at no cost, they are paid a per ton disposal cost (but less than regular disposal rates)



Efforts to Identify and Resolve Sites Requiring Minimal Work

High Risk Priority Sites With Minimal Obstacles

- Required to address highest risk sites first
- Conducted evaluation to identify high-risk sites requiring limited work
- Pool of sites evaluated:
 - Next highest ranked sites (250 sites reviewed)
 - Recently flooded sites (37 sites reviewed)
 - Sites identified as having a 80-100% chance of becoming urbanized in the next 10-years – redevelopment can introduce new exposure risks (29 sites reviewed)
 - Sites with staff knowledge of waste removal completed (25 sites reviewed)

Hurricane Matthew Flooding

October 2016



Efforts to Identify and Resolve Sites Requiring Minimal Work

High Risk Priority Sites With Minimal Obstacles

- Criteria used to identify sites easier to resolve:
 - Single property owner on single parcel
 - No structures on the waste footprint
 - No drinking water supply wells, parks, or buildings within 500 feet of the waste
 - One-acre or less in size
- Result: 26 sites identified and five already tasked to contractors
- Legislation changes would be needed to allow work on lower risk easily resolved cases (approx. 20 identified, may be many more)

Accomplishments

- Site locations were unknown - now locations researched and published on web
- Automated site prioritization system developed
- Developed procedures for expediting contracting process
- All work is done by private engineer firms – thus investing in business in the state
- 106 sites with contaminant delineation studies completed or underway
- Program now moving into remediation
- 43 sites with completed or ongoing remedies
- 34 sites with planned redevelopment made priorities – safe redevelopment helping local economy
- Over 1000 threatened water supply wells tested and alternate water provided to affected wells



Connect

NC DEQ: Waste Management

Michael E Scott, Director

217 W Jones Street

1646 Mail Service Center

Raleigh NC 27699-1646

(919) 707-8200

<https://deq.nc.gov/about/divisions/waste-management>

